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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/663,265	09/15/2000	Asif Dawoodi Gandhi	7650-0019	3816

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EXAMINER	
APPIAH, CHARLES NANA	
ART UNIT	**PAPER NUMBER**
2686	

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/663,265	GANDHI ET AL.	
	Examiner	Art Unit	
	Charles N. Appiah	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *7 and 9-12* is/are allowed.

6)☒ Claim(s) *1-6,8 and 13-18* is/are rejected.

7)☒ Claim(s) *19 and 20* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 08, 2005 has been entered.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-6, 8, 13, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **I et al. (5,734,646) in view of Uebayashi et al. (6,963,551).**

Regarding claims 1 and 17, **I** discloses a method for determining when a request for higher transmission rate should be granted to a mobile station that has access to a communication system comprising the steps of: calculating a first indicator using a second indicator for all active connections (mobile periodically measures the pilot strength on its neighbor list, col. 6, lines 60-64, mobile providing pilot strength measurements with the access request, col. 7, lines 32-51 and col. 12, lines 6-12), deciding whether to grant the mobile station access to use the requested higher transmission rate based on a comparison of at least one of the first indicator and the second the first indicator relative to the blocking threshold (steps 600, 601, 607, 607,

609 and 605 of Fig. 6, col. 8, lines 35-50 and col. 9, lines 1-12). I fail to explicitly teach tracking at least one of the indicators for a mobile station granted access to use the requested higher transmission rate prior to transmissions by the mobile station at the higher transmission rate, and deciding whether to deny the mobile station access to use the requested higher transmission rate based on a comparison of the at least one tracked indicator to the at least blocking threshold.

In an analogous field of endeavor, Uebayashi discloses a signal transmission method wherein a new communication request for a higher speed communication may be put on hold temporarily if the total number of communications is greater than a fixed value, while the request is accepted if the total number of communications transmitted simultaneously is less than or equal to a predetermined fixed value (see col. 2, lines 3-54 and col. 5, lines 22-45).

It would therefore have been obvious to one of ordinary skill in the art to incorporate the above the above teaching of Uebayashi into I's system in order to provide a traffic channel allotting method for achieving simultaneous communications at different transmission rates while providing greater transmission capacity as taught by Uebayashi.

Regarding claim 2, I further teach wherein the first and second indicators contain current loading and interference values (see col. 5, lines 3-37, col. 6, lines 45-59 and col. 8, lines 35-63).

Regarding claim 3, I meets wherein the first and second indicators also contain changes in loading and interference values due to connections being dropped or added

prior to burst start time (inherent feature of load and interference situation being time varying, col. 9, lines 4-13).

Regarding claim 4, I further discloses further comprising denying access at the requested higher transmission rate to the mobile station when the first indicator exceeds the blocking threshold value to avoid degradation of performance of the wireless communication system (mobile sent a retry command if the host's load condition is too close to the predetermined load level, col. 8, lines 35-41).

Regarding claim 5, I and Uebayashi further discloses (as taught by Uebayashi) granting the mobile station access to use a transmission rate that is lower than the requested rate when access at the requested rate is denied (see col. 5, lines 22-45).

Regarding claim 6, I further shows wherein the deciding step comprises granting access to the mobile station to use the requested higher transmission rate when the first indicator is less than or equal to the blocking threshold (see steps 601 through 607, 609 and 605).

Regarding claim 8, I's step 600, Fig. 6, in which the host's load condition is compared to a predetermined load level (see col. 8, lines 35-40) meets the step of establishing a threshold which inherently reads on the established threshold being defined by a maximum blocking threshold wherein the maximum blocking threshold is set at a value which will prevent overloading of the communication system, since the data burst request is never granted when the host cell load condition is not OK.

Regarding claim 13, the combination of I and Uebayashi as taught by Uebayashi further discloses the use of a first threshold and a second threshold value

which meets the maximum blocking threshold is constant for different estimate loading values (see col. 5, lines 22-33).

Regarding claim 18 the combination of **I** and Uebayashi further discloses as taught by Uebayashi, wherein the at least one channel indicator comprises at least one estimated performance indicator of the network channel for all active connections on the channel, the performance indicator incorporating an estimated channel load including the higher transmission rate (see col. 4, lines 20-63).

4. Claims 14, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **I et al** and **Uebayashi et al** as applied to claim 8 above, and further in view of **Kotzin et al. (5,796,722).**

Regarding claims 14-16, **I** and Uebayashi fail to teach wherein the maximum blocking threshold decreases in steps or uniformly as the loading increases.

Kotzin discloses a method for dynamic load balancing in a multi-carrier wireless communication system using handoff (see col. 3, lines 16-54). According to Kotzin, a fixed threshold value may used or alternatively the threshold may be variable depending on the system configuration and that, in communication systems, where there are periods of heavy call traffic, it may prove beneficial to use a variable threshold that would accommodate more subscribers at an albeit lower grade of service (see col. 4, lines 21-64).

It would therefore have been obvious to one of ordinary skill in the art to combine the above teaching of Kotzin by providing a variable threshold that varies as desired in the system of **I** and Uebayashi in order to account for the dynamic nature of users

including accommodating more users or subscribers at lower service grades as taught by Kotzin.

Allowable Subject Matter

5. Claims 7 and 9-12 allowed.

6. Claims 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Aldred et al. (6,278,693) discloses a system for allocating resources using quality of service parameters.

Meng (6,697,375) discloses a method for optimizing power for increasing communication capacity.

Gao et al. (6,738,350) discloses a system for congestion avoidance using transmission constraints.

Response to Arguments

4. Applicant's arguments with respect to claims 1-6, 8, and 13-18 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles N. Appiah whose telephone number is 571 272-7904. The examiner can normally be reached on M-F 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 571 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CA

CHARLES APPIAH
PRIMARY EXAMINER